STATINTL Approved Release 2001/08(1) Thrus. June 27, 1963 Declass Review by NIMA / DoD STATINT Light Source and Screen (Potential Proposal) STATINTL STATINTL STATINTL their and I discussed with STATINTL proposal on Friday June 14. It was agreed that the light source could not be separated from the screen problem in their approach. Therefore they will combine their two proposals to produce a complete solution. Their concept is fundamentally new and startlingly original. It seems to me that is is of the greatest importance that these concepts be investigated further. The concepts appear to be fundamentally sound and their feasibility should be tested at the earliest possible time. Their screen will be transparent and when not illuminated it will appear to the observer that he is looking into a dark cavity. Thus reflections from lighted room will not interfere with viewing since the light will pass thru the screen and be absorbed by the dark cavity. The image will appear almost as though it were an aerial image. They will not illuminate the screen in the conventional sense with projection light. They will impinge ultraviolet energy onto a trans coating on the glass screen. The coating will absorb the energy and fluoresce to produce visible light. Since the screen has no granular structure and does not depend on diffusing visible light, it does not have the resolution limitations of present screens. STATINTL does not feel they will be intensity limited. He thinksthey can produce dazzling brightness in their fluorescence. STATINTL agreed to submit feasibiltiy study proposal by Cal July 1, 1963. He called later and requested an extension. He had to be out of town the last week of June STATINTL and he had a vacation scheduled the first two weeks of July, so he wanted until July 22 to do the proposal. STATINTL I said 1 would inform and advise him if that STATINTL schedule was not satisfactory. offered to postpone his vacation of the urgency required it. offered to Approved For Release 2001/08/13: CIA-RDP78B04747A00100006903

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Thurs. June 27, 1963

Film Viewers and Readers

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On Fri. June 21 they were in process of moving out of the

The new address wil be:

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and a half a dozen others were there completing the move. All shop equipment was gone and also the engineering area was moved. Only office equipment files and records were left.

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and one secretary were staying in to keep that office open till the first of the month. was going to keep their digital counter and one technician at to continue work on debugging.

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No detail design work has been started on the digital counter for the 705-R reader. They had engaged a man to work on the packaging of the Reader Counter but he has spent his time so far on schematics and bringing the present drawings up to date. This is necessary preliminary since the new counter will draw heavily on the present counter and probably use many of the drawings. The packaging however will be considerably different.

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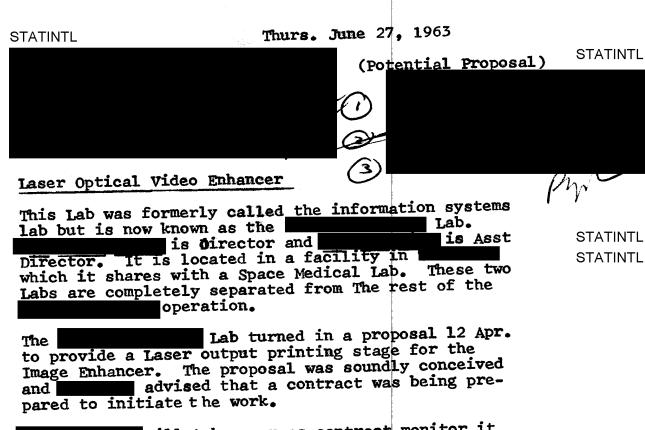
They will have to hire a new man in process for the packaging design. There was no estimate as to when the design work would be started again or finished. Thought that manufacture of the counter would take about a month.

It seems to me that the most optimistic estimate for completion of the counter is early Sept. Assembly of the platen and drives should be well along by the end of July. The cabinet will also be completed shortly.

Viewers. They have started on the new viewer order by placing purchase orders with their old vendors. They seem confident of meeting the delivery schedule.

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will take over as contract monitor it seems, and George and I visited the Lab This is a talented group and they have dollars a year backing from the parent in-house development work on Lasers, closed circuit TV type work and other things connected with electrical manipulation of video signals. They also have several contracts for development work.

They had not received the contract yet for the work on the Image Enhancer which was expected momentarily. In checking back with WDC, we found that the contract could not be placed from this year's funds and there fore would be delayed. This was a bit of a shock to the Contractor. Apparently the Staff work will have to be done when George gets back.

The people whose clearances had been requested in March had not been contacted or briefed yet so there was no conversation regarding secure matters.

This Lab is working on several things which may be of future interest and so a continual appraisal of their activity is recommended.

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left about a month ago and is now associated with there are two activities at the project which are of interest. One is their project which could have an important bearing on mission tracking and plotting. The other is their AUTOMATIC PHOTO READING work which has possible application to automatic sorting of mission material into urban/rural or other texture type classifications.

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STATINTL STATINTL STATINTL Project Director; and
head of Reconnaissance/Intelligence Program Office
briefed and me on the concept.
They have conceived a complete system using a KC-6
Cartographic Camera and five Lasers for Terrain
Profile Recording. Computer operation on the output of the Laser TPR enables them to make precise
determinations of relative vehicle location and
attituate. The precision of these determinations
they claim will permit bridging over long distances
without intermediate ground control. Of more interest
perhaps is the possibility of providing automatically,
information on precise mission ground track. This
would be a great help in preparing Mission strip maps
to the PI.

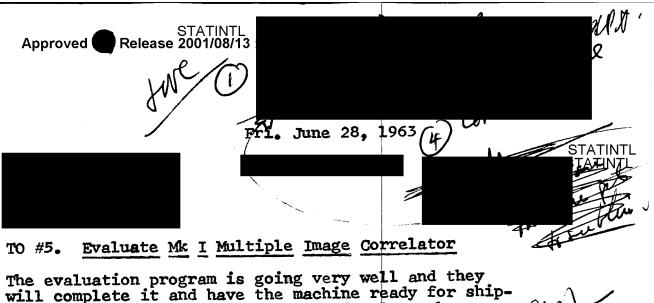
Since the five Laser beams illuminate small spots on the ground and the camera sees these spots when it takes its picture, it seemed possible that an-a during viewing in a projector, a detector might be devised which would lock onto these spots. I inquired if this might permit automatic stereo registration of continuously moving film. Continuous stereo viewing of mission material being scanned (presently not feasible) would certainly be an important development. They were not certain whether this was possible, but it seems to me the question should be explored further.

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ment as scheduled the latter part of July. They have generated considerable output which demonstrates beyond doubt that the concept is feasible.

The machine does not (and was not intended to) improve

The machine does not (and was not intended to) improve the image of excellent fine grain pictures taken under ideal conditions. There is however substantial image improvement of grain limited pictures taken under adverse conditions.

The Mk 11 machine which will be an operational piece of equipment will be an excellent addition to your bag of tricks. The most urgent current aspect is to implement a system which will take advantage of the power of the correlation concept.

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of discussed their latest developments of the theory with and the subject was quite sound. The two prong attack on the problem, theoretical and experimental, has been fruitful and has put well ahead of anyone else in this field.

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were urged to see the collection people as soom as possible to propose techniques which would produce inputs to exploitation for use of the concept.

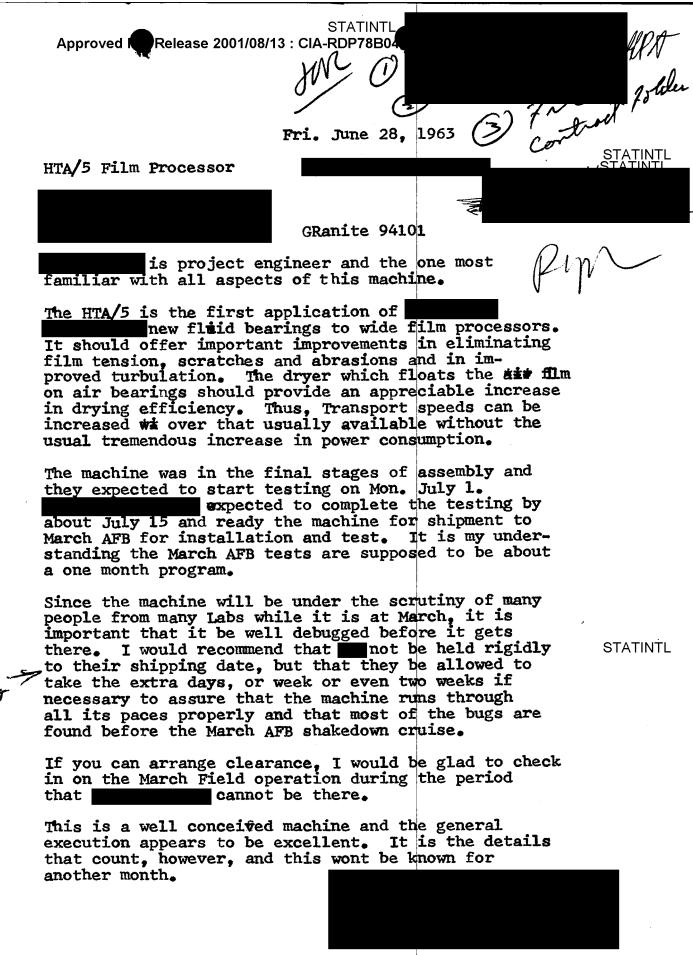
There is considerable enthusiasm at over the results of their recent efforts in image correlation and it is of great importance to maintain the continuity of this effort.

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